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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	
Takayuki SATO	
Appln. No. 09/682,117	Group Art Unit: 2661
Confirmation No. 8778	
Filed: July 24, 2001	Examiner: Douglas W. Olms

For: **NETWORK ADMINISTRATION APPARATUS, NETWORK ADMINISTRATING PROGRAM, NETWORK ADMINISTRATING METHOD AND COMPUTER NETWORK SYSTEM**

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § § 1.97 and 1.98

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir,

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached Form PTO/SB/08A and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date for an application other than a continued prosecution application (CPA) under § 1.53(d); (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under § 1.114, and therefore, no Statement under 37 C.F.R. § 1.97 (e) or fee under 37 C.F.R. § 1.17 (p) is required.

INFORMATION DISCLOSURE STATEMENT
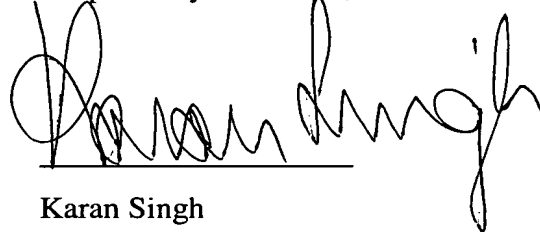
U.S. Application No. 09/682,117

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following:

A concise explanation of JP 2000-134207 is attached hereto.

English patent abstract of JP 1999-270803 is attached hereto.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

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ATTACHMENT TO INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § § 1.97 and 1.98 DATED August 2, 2002

Concise Explanation of Relevance

JP2000-134207-A

VIRTUAL LOCAL AREA NETWORK CONSTITUTION INFORMATION MANAGEMENT SYSTEM

(57) Abstract

PROBLEM TO BE SOLVED: To improve reliability in the setting/updating processing of a VLAN table and to overcome/suppress the possibility of erroneous and improper operations.

SOLUTION: A VLAN entering request part 121 in a host 1 (120) issues a VLAN entering request to a LAN switch 110. The entering request is delivered through a VLAN request receiving part 112 in the LAN switch 110 to a VLAN request judgment part 114. In the VLAN request judgment part 114, the information including a host ID, a user ID, a program name and a communication protocol of the issuance source of the entering request and the information entered in a request judgment table 113 are verified. The entering request is denied if it is not permitted while a VLAN participation processing part 115 is called if it is permitted. In the VLAN participation processing part 115, a VLAN table 111 is updated so as to make the host 1 (120),

serving as an issuance source of the entering request, enter in VLAN-A (140).

Embodiments

(0019)

Fig.2 shows a configuration of a request judgment table 113. The request judgment table 113 records various information to judge whether or not participation is previously permitted in VLAN, as shown in Fig.2.

(0020)

Next, an operation in a case of making a host 1 (120) participate in a VLAN-A (140) will be described.

A VLAN entering request part 121 in the host 1 (120) issues a VLAN entering request to a LAN switch 110. After the entering request is received by a LAN request receiving part 112 in the LAN switch 110. The entering request is delivered to a LAN request judgment part 114. The LAN request judgment part 114 verifies the information including a host ID, a user ID, a program name, or a communication protocol of an issuance source of the entering request and the information recorded in the request judgment table 113, the entering request is denied if it is not permitted while a VLAN participation processing part 115 is called if it is permitted. The VLAN participation processing part 115 updates a VLAN table 111 so as to make the host 1(120), serving as an issuance source of the entering request, enter in VLAN-A (140). The VLAN table 111 holds configuration management information of each VLAN such as a port address participated in the VLAN, a MAC address, or a network address determined by a communication protocol. Similar to the above operation, the host 1 (120) may leave from the VLAN-A (140).

(0021)

A group of entries on the request judgment table 113 may be comprised of members to permit the VLAN request on each VLAN. Further, the group of entries is not classified into each VLAN and may be comprised of the members as a whole. The LAN request judgment part 114 verifies all entries in the request judgment table 113 to perform permission judgment. Based on management policy just in case, the only specific entry to perform permission judgment. For example, in a case of comprising the VLAN by a business unit or a project unit,

a VLAN request permission host ID is defined as the specific entry in order not to make a host which is not relative thereto participate, freely. The only host to permit the VLAN request participation host ID in the request judgment table 113 is previously described. In the LAN request judgment part 114, it is possible to deny the entering request from the host in which the entering request is not permitted. When a network manager tries to make the host participate in a VLAN except for an objective VLAN by an error operation, the entering request is denied by the LAN request judgment part 114. As a result, the network manager can notify operational error for the VLAN.

(0022)

As described above, an improper VLAN entering request can be excluded by including the request judgment table 113 and the LAN request judgment part 114 in the LAN switch 110 and performing permission judgment of the VLAN request. Thereby, a VLAN with high reliability can be realized.

(0038) [Embodiment 7]

Fig.8 shows a diagram of a VLAN configuration showing a configuration of an embodiment 7. In Fig.8, configuration elements at the host 1 (120) side are the same as configuration elements in the embodiment 6 shown in Fig.7. In contrast, configuration components of the present invention at the VLAN switch 110 side are arranged in a VLAN management server 170 connected by the LAN switch 110 and a communication medium 180 such as RS 232C, an IEEE 1394 or a USB.

(0039)

Next, an operation in a case of making the host 1 (120) participate in the VLAN-A (140) will be described. The VLAN entering request is issued to the VLAN management server 170 using the 121 in the host 1 (120). After the entering request is received by the LAN request receiving part 112 in the VLAN management server 170, and the entering request is delivered to the LAN request judgment part 114, the LAN request judgment part 114 judges whether or not the entering request is permitted and the VLAN participation processing part 115 is called if it is permitted. The VLAN participation processing part 115 updates the VLAN table 111 in the LAN switch 110 via the communication medium 180 so as to make the

host 1 (120), serving as an issuance source of the entering request, enter in VLAN-A (140). Further, it is possible to leave the host 1(120) from VLAN-A (140) via the communication medium 180 from the VLAN management server 170 similar to the above operation.